TITLE

POST-MOLDING TREATMENT OF CURRENT COLLECTOR PLATES FOR FUEL CELLS TO IMPROVE CONDUCTIVITY ABSTRACT

Disclosed is a method of making a current collector plate for use in a proton exchange membrane fuel cell. The method includes the steps of: (a) molding the current collector plate by injection, compression or any other molding process from a resin/conductive filler composition; (b) measuring the current collector plate's average thickness; (c) measuring the current collector plate's through-plane resistivity; (d) removing a portion of the current collector plate's surface layer by abrasion; and (e) repeating steps (a) to (d) until a desired plate thickness is removed. The desired plate thickness removed is no more than about 10 micrometers, and preferably about 5 micrometers.

DPF/dmm